

AMENDMENT TO THE CLAIMS

1-11. (Cancelled).

12. (Original) A gantry support structure comprising:

a damping structure comprising a plurality of overlapping segments forming at least a portion of a housing and having a plurality of fastening regions spaced apart about the housing with damping material disposed between the segments.

13. (Currently Amended) The gantry support structure of claim 12 and further comprising a rigid plate secured to the housing and wherein the housing is U-shaped.

14. (Original) The gantry support structure of claim 13 and further comprising a plurality of flanges extending from the housing for fastening the housing to the rigid plate.

15. (Original) The gantry support structure of claim 14 wherein at least one of the flanges is adapted to fasten to a major surface of the rigid plate.

16. (Original) The gantry support structure of claim 12 wherein the damping material comprises a viscoelastic damping material.

17. (Original) The gantry support structure of claim 16 wherein opposed major surfaces of the viscoelastic damping material are joined to each respective segment.

18. (Currently Amended) The gantry support structure of claim 13 and further comprising linear bearings that support ~~a~~an element moveable relative to the support structure, the linear bearings being secured to the rigid plate.

19. (Original) The gantry support structure of claim 18 and further comprising a plurality of fasteners, each fastener passing through apertures of the rigid plate to secure the linear bearings and the U-shaped housing together on opposite sides of the rigid plate.

20. (Original) The gantry support structure of claim 13 wherein the housing further comprises overtravel stops limiting relative movement of overlapping segments.

21. (Original) The gantry support structure of claim 20 wherein the overtravel stops comprise a rod secured to a segment secured to one of the overlapping segments and extending through a clearance aperture provided in said overlapping segment.

22-52. (cancelled).

53. (new) The gantry support structure of claim 12 wherein housing is elongated and U-shaped in cross-section, and wherein the fastening regions are spaced apart in cross-section.

54. (new) The gantry support structure of claim 53 and further comprising a rigid plate.

55. (new) The gantry support structure of claim 54 wherein the housing comprises first and second wall plates joined to the rigid plate, first and second L-shaped wall plates, and a plurality of intermediate wall plates, wherein a first intermediate wall plate is secured to the first wall plate with the damping material disposed therebetween and to the first L-shaped wall plate with the damping material disposed therebetween, wherein a second intermediate wall plate is secured to the second wall plate with the damping material disposed therebetween and to the second L-shaped wall plate with the damping material disposed therebetween, and wherein a third intermediate wall plate is secured to the first L-shaped wall plate with the damping material disposed therebetween and to the second L-shaped wall plate with the damping material disposed therebetween.

56. (new) The gantry support structure of claim 54 wherein the housing comprises first and second wall plates joined to the rigid plate, first and second L-shaped wall plates, and a plurality of intermediate wall plates, wherein a first intermediate wall plate is secured to the first wall plate with bolts and with the damping material disposed therebetween and to the first L-shaped wall plate with bolts and with the damping material disposed therebetween, wherein a second intermediate wall plate is secured to the second wall plate with bolts and with the damping material disposed therebetween and to the second L-shaped wall plate with bolts and with the damping material disposed therebetween, and wherein a third intermediate wall plate is secured to the first L-shaped wall plate with bolts and with the damping material disposed therebetween and to the second L-shaped

wall plate with bolts and with the damping material disposed therebetween.

57. (new) The gantry support structure of claim 54 and further comprising:

a pair of rails;  
supports for supporting the rails in a spaced-apart relationship; and  
wherein the housing and plate span between the rails.

58. (new) The gantry support structure of claim 57 and further comprising moveable trucks supporting the housing and plate on the rails.

59. (new) The gantry support structure of claim 58 wherein the housing comprises first and second wall plates joined to the rigid plate, first and second L-shaped wall plates, and a plurality of intermediate wall plates, wherein a first intermediate wall plate is secured to the first wall plate with the damping material disposed therebetween and to the first L-shaped wall plate with the damping material disposed therebetween, wherein a second intermediate wall plate is secured to the second wall plate with the damping material disposed therebetween and to the second L-shaped wall plate with the damping material disposed therebetween, and wherein a third intermediate wall plate is secured to the first L-shaped wall plate with the damping material disposed therebetween and to the second L-shaped wall plate with the damping material disposed therebetween.

60. (new) The gantry support structure of claim 58 wherein the housing comprises first and second wall plates joined to

the rigid plate, first and second L-shaped wall plates, and a plurality of intermediate wall plates, wherein a first intermediate wall plate is secured to the first wall plate with bolts and with the damping material disposed therebetween and to the first L-shaped wall plate with bolts and with the damping material disposed therebetween, wherein a second intermediate wall plate is secured to the second wall plate with bolts and with the damping material disposed therebetween and to the second L-shaped wall plate with bolts and with the damping material disposed therebetween, and wherein a third intermediate wall plate is secured to the first L-shaped wall plate with bolts and with the damping material disposed therebetween and to the second L-shaped wall plate with bolts and with the damping material disposed therebetween.

61. (new) The gantry support structure of claim 54 wherein the U-shaped housing comprises first and second wall plates joined to the rigid plate, a first L-shaped wall plate fastened to the first wall plate with damping material disposed therebetween, a third wall plate fastened to the first L-shaped wall plate and fastened to a second L-shaped wall plate with damping material disposed therebetween, a fourth wall plate fastened to the second L-shaped wall plate and fastened to the second wall plate with damping material disposed therebetween.

62. (new) The gantry support structure of claim 54 wherein the U-shaped housing comprises first and second wall plates joined to the rigid plate, a first L-shaped wall plate fastened to the first wall plate with damping material disposed therebetween, a third wall plate fastened with bolts

to the first L-shaped wall plate and fastened to a second L-shaped wall plate with damping material disposed therebetween, a fourth wall plate fastened to the second L-shaped wall plate with bolts and fastened to the second wall plate with damping material disposed therebetween.

63. (new) The gantry support structure of claim 54 and further comprising a second rigid plate movably joined to the first-mentioned rigid plate and a second U-shaped elongated housing joined to the second rigid plate so as to encircle the first-mentioned rigid plate and first-mentioned U-shaped housing, wherein the second U-shaped comprises a plurality of overlapping segments joined together with damping material therebetween at a plurality of fastening regions, wherein the fastening regions are spaced apart in cross-section.